



**U.S. Department of Agriculture
eGovernment Program**

eGovernment Executive Council & Working Group

Mission Area eGovernment Case Studies

December 12, 2001



Case Studies by Mission Area

- ☐ **Food Safety**
- ☐ **Food, Nutrition and Consumer Services**
- ☐ **Rural Development**
- ☐ **Marketing and Regulatory Programs**
- ☐ **Research, Education, and Economics**
- ☐ **Natural Resources and Environment**
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Food Safety



Performance Based Inspection System

Description/Purpose of Initiative

The Performance-Based Inspection System (PBIS) is an automated scheduling and management system for inspection of meat, poultry, and egg products. The function of the system, which operates on microcomputers in each District Office, is to automate inspection scheduling based on individual plant characteristics, and to compile a history of inspection findings by plant.

Benefits:

Inspection findings are entered into the system and may be used in the future as the basis for adjusting inspection levels, which can vary from a standard level of inspection to a more or less intense level of inspection based on past compliance with regulatory requirements.

Type of Initiative: Government to Government/Employees/Internal Efficiency

Web Site URL: Internal access only.

Lessons Learned: Extensive field testing of software has led to many improvements and corrections.

Applicability to other Mission Areas/Agencies: None.

Number and Description of Users: Inspectors in 7000+ meat/poultry inspection plants

Future directions planned

Version 5.0 will be given to field inspection employees in mid FY 2001. This will make it possible for the field inspector to print schedules and enter inspection results. This version will enhance data reporting, and provide a truly timely national database for HACCP inspection results. The database will be upgraded to Sybase. It is projected that states will be able to use PBIS 5.0 for their own inspection programs in the future.



Automated Import Information System

Description/Purpose of Initiative

The Automated Import Information System (AIIS) is a computer system that provides a means of allocating inspection activities for meat and poultry products imported from foreign countries. Implemented in 1978, AIIS links all ports of entry, makes inspection assignments, and collects compliance histories for countries and plants. FSIS import inspectors enter data about shipments, and the AIIS identifies shipments for sampling and determines the appropriate inspection assignment. All shipments of products are checked for proper certification and general condition, and some shipments are randomly selected for additional inspection assignments as directed by AIIS. FSIS uses AIIS information in verifying and evaluating the performance of the foreign country's inspection system.

Type of Initiative: Government to Partner, Government to Government/Employees/Internal Efficiency

Benefits:

The upgrade of AIIS has enabled the Agency to (1) Focus the sampling of products at port of entry on monitoring a country's inspection system rather than individual plants within the system; (2) provide better information for making equivalency decisions; and (3) increase the responsibility of the industry for control of imported meat and poultry.

Time to create/costs: The update of AIIS took 6 months and 4 staff years.

Future Directions Planned:

FSIS has just revised the AIIS system to: (1) Focus the sampling of products at port of entry on monitoring a country's inspection system rather than individual plants within the system; (2) reprogram the AIIS to accommodate the new system and to provide better information for making equivalency decisions; and (3) modify procedural and facility requirements for import establishments to increase the responsibility of the industry for control of imported meat and poultry. Also, a pilot with New Zealand and the U.S. Customs Service will provide for future expedited product entry and one-stop contact with U.S. Government agencies that regulate imports of meat and poultry products.

Lessons Learned:

AIIS was an early use of automation to dramatically improve information sharing among import inspectors and to improve the model used to assign random sample inspections. It also provided a guard against allegations of trade barriers and favoritism for one trading partner over another.

Number/Description of Users: 75 FSIS inspectors carry out reinspection at 150 official import establishments.



FSIS Export Library

Goal or purpose of initiative/needs met:

The Export Library presents information on foreign country export requirements for meat and poultry products. It contains **Export Notices** which provide a rapid method of dissemination of new and urgent export information, and **Country Requirements** which contain information obtained by FSIS through direct, government-to-government communication with foreign country officials. Country Requirements address areas such as product eligibility, labeling, processing requirements, documentation and Plant eligibility. The information herein facilitates and expedites foreign trade.

Type of initiative:

- X Government to Citizen
- X Government to Partner
- X Government to Government/Employees/Internal Efficiency

Web site URL: <http://www.fsis.usda.gov/OFO/export/explib.htm>

Benefits:

Prior to implementation of the Export Library in 1993, FSIS headquarters would send paper notices to each of the 7000+ meat and poultry establishments in the country. There were many instances of the information not being received and companies applying incorrect or outdated information in preparing products for export. The result was American products would be refused entry at foreign borders causing monetary and customer loss for the company. Now, every company and citizen has access to this Library, thereby ensuring that products are prepared for export in accordance with foreign country requirements.

Number and Description of Users:

7000+ meat and poultry plants; any citizen who wishes to know about foreign country export requirements.



Laboratory Electronic Application for Results Notification (LEARN)

Goal or purpose of initiative/needs met:

LEARN is an FSIS Intranet application that transmits laboratory results such as microbiological, food chemistry, and residue analyses performed at FSIS laboratories. LEARN provides FSIS meat and poultry inspectors with immediate access to individual laboratory results for the establishments they inspect. Owners of establishments may receive results via e-mails generated by the application. LEARN also provides improved reports to field offices and to upper management.

Type of initiative:

- X Government to Partner
- X Government to Government/Employees/Internal Efficiency

Web site URL: Restricted Intranet site

Benefits:

LEARN is the first web-based application to be used by the Agency's field inspection force. LEARN replaced a legacy e-mail and database system with an SQL database that delivers results through an Intranet. The original system could only deliver results for one plant for one day. The new system enables inspectors and managers to obtain results for multiple plants over a 2-week period. An extensive reporting tool enables senior managers to quickly isolate potential and presumptive positive microbiological test results, which are often the trigger for a product recall. LEARN also provides results to any establishment that provides the Agency with an e-mail address.

Time to create/costs: The update of LEARN took 6 months and 1-2 staff years.

Lessons Learned:

LEARN demonstrated that a nation-wide Intranet application could be deployed to inspectors of varying computer skill levels without having to provide on-site training in the specific application.

Number and Description of Users:

Inspectors in 7000+ meat and poultry plants; FSIS District Office and headquarters management; any plant manager who has furnished a valid e-mail address.



Pathogen Reduction Enforcement Program

Description of Program:

The Pathogen Reduction Enforcement Program (PREP) schedules, tracks, and reports information on the PR/HACCP *Salmonella* testing program.

Goal or purpose of initiative/needs met:

This system calculates needed information on results of analysis of *Salmonella* samples included in sample sets from establishments and reports the performance on the sets. The system also provides feedback to Field Operations, including completed set results and reports on field personnel in establishments not providing samples. Owners of establishments may receive results via e-mails generated by the application.

Type of initiative:

- X Government to Partner
- X Government to Government/Employees/Internal Efficiency

Web site URL: None

Benefits:

Results are used to verify the achievement of pathogen reduction targets and compliance with national baseline standards.

Lessons Learned:

PREP showed the importance of an adequate support infrastructure to quickly respond to hardware and software issues after the system was on-line.

Number and Description of Users:

Inspectors in 7000+ meat and poultry plants; FSIS District Office and headquarters management; any plant manager who has furnished a valid e-mail address.



USDA Meat and Poultry Hotline

Goal or purpose of initiative/needs met:

The Hotline was created in 1985 after piloting the project nationally and determining that there was a need for the service and that the public would respond favorably. The toll-free Hotline helps prevent foodborne illness by providing food safety specialists who answer questions from consumers, media, health professionals, educators, and other information multipliers concerning safe food handling. In an emergency situation, such as a recall, the Hotline provides vital information to the public in a timely manner. The service is available via TTY and email. Automated messages can be heard 24/7. The service is available in both English and Spanish.

Type of initiative:

- X Government to Citizen
- X Government to Partner

Web site URL: www.fsis.usda.gov/oa/programs/missnhl.htm

Benefits:

The callers to the Hotline consistently compliment the service and access to the Federal Government. Providing real-time access to food safety specialists is excellent customer service and helps the public feel connected to their government.

Future directions planned:

FSIS plans to encourage more use of the email and Web access points to the Hotline. Also, the Hotline is an integral part of the Agency's planned Customer Complaint Monitoring System (CCMS) that will allow customers to log in complaints onto a Web access point.

Lessons Learned: It is critical to keep the Hotline staff abreast of the varied programs of the agency. Staff require professional experience in order to answer technical questions about food safety. Ongoing training is essential.

Applicability to other Mission Areas/Agencies: The model can be applied across agency lines.

Number and Description of users: In FY2001, there were approximately 90,000 callers to the Hotline.



Food Safety Jobs Online

Goal or purpose of initiative/needs met:

To reduce the time required to fill FSIS positions without reducing the quality of applicants presented to managers for selection. To make FSIS positions more accessible to individuals interested in applying for food safety jobs. To expand the visibility of FSIS in the recruitment arena and to assist with more targeted recruitment.

Type of initiative: Government to Citizen, Government to Partner, and Government to Government/Employees/Efficiency

Web site URL: www.foodsafetyjobs.gov

Benefits:

Using an online system for hiring provides for faster evaluation of applications without loss of quality. In the best case scenario, a certificate can be given to the selecting official within a week. Staff are able to work on several jobs simultaneously, thereby helping to fill positions more quickly. Applicants can apply for FSIS positions easily and quickly as compared to the traditional process.

Time to create/costs: The Agency spent a year developing procedures and evaluating software packages/vendors.

Time Saved: This is one of the most significant benefits. Staff have documented, in some cases, weeks of work saved. In every case, many, many hours of saved staff time is documented. Applicants can apply for FSIS positions with time saved as well--process is very easy and submission is instantaneous.

Cost savings: Volume of paper significantly reduced. Travel costs of panels eliminated. Staff time.

Future directions planned: Expand position series available for online system. Reconsider software package. Move out of the pilot stage--make the system permanent.

Lessons Learned: Communication with supervisors and managers is critical for success.

Feedback from users: Survey ongoing.

Applicability to other Mission Areas/Agencies: The model can be applied across agency lines.

Number and Description of users: Thirty positions so far. Total applicants approximately 900 to date.



Food, Nutrition and Consumer Services (FNCS)



Electronic Benefit Transfer

Description:

Electronic Benefit Transfer (EBT) is an electronic system that allows a recipient to authorize transfer of their government benefits from a Federal account to a retailer account to pay for products received. EBT is currently being used in many States to issue food stamp and other benefits.

Type of initiative: Government to Citizen

Goal or purpose of initiative/needs met:

By eliminating paper coupons that may be lost, sold or stolen, EBT may help cut back on food stamp fraud. EBT creates an electronic record of each food stamp transaction, making it easier to identify and document instances where food stamps are "trafficked," or exchanged for cash, drugs, or other illegal goods.

Benefits:

EBT eliminates the cumbersome processes required by the paper food stamp system. In Fiscal Year 1997, the Food Stamp Program issued almost \$20 billion worth of benefits. Some 186,000 retailers are authorized to accept food stamps. In a single month, retailers made 1.7 million deposits of food stamp coupons in more than 26,000 banks. Banks in turn made almost 27,000 deposits in Federal Reserve District Banks. Coupons are counted at each step, making the accounting enormously complex and labor intensive. EBT eliminates much of the paper handling involved in the food stamp system, and automates the accounting process.

Retailers and bankers like EBT because it offers simplicity of accounting and reduces labor costs because there are no coupons to sort, count, and bundle. All the accounting is done automatically.

The Federal government saves time and money by moving to EBT. The process of printing, transporting, safeguarding, distributing, accounting, and destroying the food stamp coupons is eliminated.

Number and Description of users: Over 80 percent of food stamp benefits are currently being issued by EBT.



Partner Web

Description:

The purpose of the FNS Partner Web is to provide a facility over the Internet that permits FNS to conduct general-purpose business communication with our direct partners.

Type of initiative:

Government to Citizen

Goal or purpose of initiative/needs met:

The Partner Web uses a combination of message boards, chat rooms and traditional web sites to enable information sharing.

Agencies Involved:

The largest direct partners with whom FNS does business are State Agencies.

Benefits:

The system has been built to be very scalable and extensible. The Partner Web is designed to be segmented into customizable business areas, called “Web Topic Areas”. Each Topic Area is made up of numerous discussion areas where people “post” threaded messages or upload and download files, one or more chat rooms for real time conversation, and a traditional web site for housing static information and for facilitating navigation.

The Partner Web is both secured and encrypted. Security is easily extended to individual Topic Areas, or even down to individual discussion areas. In addition, the Partner Web administration functions have been scaled to work at the Topic Area level. Making administration available at the Topic Area level puts security and management into the hands of those program staff who are most knowledgeable about their information needs.



Rural Development (RD)



USDA Lender Interactive Network (LINC)

Description: USDA-LINC (Lender Interactive Network Connection) provides an internet application, where lenders could provide periodic and default status reports electronically on their single family housing guaranteed loan portfolio.

Goal or Purpose of Initiative: GLS moved to a business to government (B2G) e-commerce environment with our trading partners: lenders and service bureaus. The B2G exchange was made a mandatory process by the single family housing business community for all periodic and default reporting by September 2001. The lenders/service bureaus have the option of transmitting ANSI X.12 electronic data interchange (EDI) files via the internet or, if they hold less than 100 loans, completing actual web pages. The system also allows two large trusted partners to utilize Virtual Private Network (VPN) technology over the public internet to automatically send status reports, allows GLS to process in near real time, and automatically receives the results directly to their computers.

Benefits: The Single Family Housing Electronic Status Reporting project expedites the collection of loan status information and eases the reporting process for both the lenders and Rural Development. The performance goals include better financial reporting on their portfolio. The agency goal is to obtain reporting on 90% of the portfolio by calendar year end 2001 and to achieve near 100% reporting in the 2002 timeframe. The gap will be closed in providing additional automation efforts to collect data on loans that change servicers through the course of the reporting period. In the initial implementation of LINC, more status reports were received electronically than paper-based. The lenders indicated that it was easier to fulfill their reporting requirements with the government electronically.

Number and Description of Users: This project targets the lender community but the ultimate benefactor is the rural home owner able to obtain adequate financing. Currently, Rural Development and the Farm Service Agency have a portfolio of 245,000 loans totaling over 27.6 billion dollars. These loans are held by over 9,400 lending institutions nationwide.

Applicability to other Mission Areas/Lessons Learned: Rural Development and the Farm Service Agency have developed the guaranteed loan system as business partners. As LINC is extended it will accommodate the business needs for multi-family housing, community facilities, business programs, water and environmental programs, and the farm loan programs. In addition, the features provided could be leveraged by other government agencies providing guaranteed financing through lenders. GLS has been developed component style and can be leveraged on various platforms. The LINC services are hosted in a USDA web farm environment that is scalable and could support hosting of other similar applications.



BI Loan Pack 2000

Description: This automated underwriting solution has served to increase conditional commitment response to participating lenders and provide additional risk management capabilities during the qualification process. The initiative was implemented in 1996.

Goal or Purpose of Initiative: The current loan origination process takes up to 45 days to complete. With use of BI Loan Pak 2000 this becomes a streamlined process. The process begins with the lender using the USDA software to enter the information on their hard drive or a diskette. The software provides the information collection. The information is then sent to the State Office where credit and financial analysis software is used to process the application. The State Office prints the conditional commitment and forwards to the lender. If National Office approval is required, the application can be submitted in a software package to headquarters. The software runs like a “Turbo-Tax” Program and asks lenders for requested information only once. If duplicate information or subsequent applications are required the system fills in the blank information.

Benefits: Supports the performance goals in saving and creating jobs for rural residents, reduces agency delinquency in loan making by approving applications to a representative sample of low, medium, and some high risks applicants, makes faster loan decisions, stream lines documentation, improves loss rates, leverages field staff to focus on referred loans.

Number and Description of Users: This project targets the lender community but the ultimate benefactor is the rural economy. There are approximately 1500 Lenders participating in this program, loan amounts average \$1.5 million, but can be made up to \$25 million.

Applicability to Other Mission Areas: GPEA when fully implemented will eliminate the need for this software.



Marketing and Regulatory Programs (MRP)



Marketing and Regulatory Programs (MRP)

**Animal and Plant Health and Inspection Service
(APHIS)**



Import Authorization System

Description:

Automated Services to Customer

Agency or agencies involved:

Animal and Plant Health Inspection Service

Goal or purpose of initiative/needs met: Apply/Receive Permits online

Type of initiative:

- ✓ Government to Citizen
- ✓ Government to Partner
- ✓ Government to Government/Employees/Internal Efficiency

Web site URL:

<https://web01.aphis.usda.gov/IAS.nsf/Mainform?OpenForm>

Benefits:

cost savings – staff, mailing, information services

awards won – Government Technology Leadership Award

time saved – data entry, issue/deliver permits

errors reduced – transcription

feedback from users, etc. – very positive, increased usage

Number and Description of users: 25% of permit applications/business



Marketing and Regulatory Programs (MRP)

Agricultural Marketing Service (AMS)



Customer Portal for USDA Market News

Description:

User-customizable web portal access to MN reports

Agency or agencies involved: AMS

Goal or purpose of initiative/needs met:

Mass customization for report access

Type of initiative:

✓ Government to Citizen

Web site URL: Under development

Benefits:

Provide public and industry with rapid, richer access to all USDA market news reports

Allows users to quickly find related content and subscribe to reports of interest

Allows subscribed reports to be delivered to WAP devices

Number and Description of users:

Hundreds of industry producers, traders and growers



Marketing and Regulatory Programs (MRP)

**Grain Inspection, Packers and Stockyards Administration
(GIPSA)**



Electronic Rulemaking

Description:

Public comment on ANPR for Biotechnology

Agency or agencies involved: GIPSA and AMS

Goal or purpose of initiative/needs met:

Allow public submission and review of comments

Type of initiative:

X Government to Citizen

Web site URL:

<http://www.usda.gov/gipsa/biotech/anpr/anpr.htm>

Benefits:

Cost savings: Estimate \$200,000 over contract cost

Time saved: 1 Year Development Time

Number and Description of users: 3,000 comments and 27,000 reviews



Research, Education, and Economics (REE)



Research, Education, and Economics (REE)

**Cooperative State Research, Education, and Extension Service
(CSREES)**



Agriculture in the Classroom (AITC)

Description: AITC provides electronic linkage of State AITC programs, USDA education initiatives, other Departments and Agencies, and K-12 teachers. The web site provides general information, downloadable lesson plans including streamed video, grants information, teacher recognition, support mechanisms including science projects and all state AITC programs, and a Kid's Corner that enables students to actively engage in self-directed activities to support their own learning.

Goal or Purpose of Initiative: To help students gain a greater appreciation of food, agriculture and natural resources in the economy and society, develop more rational consumers, citizens and voters who support science based agriculture and resource policies; to stimulate their interest in science and technology; and make them aware of higher education and career opportunities, encourage teachers to integrate food, agriculture and natural resource topics into their broad curriculum

Benefits: Teacher access to a comprehensive array of teaching support materials that are accurate, meet teaching and learning standards, and that can be integrated into existing curricula in science, math, social science, humanities, etc. Student access to activities and materials that stimulate interest and encourage teacher-directed and self-directed learning and growth through virtual field trips and other learning activities

Agencies Involved:

USDA CSREES

USDA Education Coordinating Council

Agencies with teaching materials appropriate for K-12 education (ARS, AMS, APHIS, etc.); NASA

Type of Initiative:

Government to Citizen

Web Site URL:

<http://www.agclassroom.org>

Number and Description of Users:

AITC annually reaches approximately 5 million K-12 students through 130,000 teachers nationwide



**Research, Education, and
Economics
(REE)**

**National Agricultural Statistics Service
(NASS)**



Online Published Estimates Data Base (PEDB)

Description: On line Data Base allows customer to select significant U.S. and State information on NASS Agricultural Statistics they desire by commodity, state(s) and year(s) with the ability to download it for further processing.

Goal or Purpose of Initiative: To make easy access available at customer option to USDA Agricultural Statistics in key formats that enhances their use of the data

Benefits:

NASS has savings because statisticians are able to do more technical statistical work instead of responding to customers request for data. The customer is able to select the data faster and easier obtaining what they want 24 hours per day, eliminating redundant data entry and enhancing speed and accuracy for those obtaining the data. User comments are very complimentary of this service being available and the ability to transport the published data directly into their systems. NASS continues to listen to the customers and works to continue improvements provided by new information technology. AMS has entered into an agreement with NASS to download data directly from the PEDB because legislation requires AMS to provide reports in an expeditious manner and they can transport all the NASS data directly to their computer environment

Agencies Involved:

NASS builds this data base and all other agencies use it

Type of Initiative:

Government to Citizen

Government to Partner

Government to Government/Employees/Internal Efficiency

Web Site URL:

<http://www.usda.Gov/NASS/>

Number and Description of Users: The On-Line PEDB website has varying number of visitors on a daily basis consisting of the general public, teachers, students, researchers, agricultural businesses, and many other government agencies.



**Research, Education, and
Economics
(REE)**

**Agricultural Research Service
(ARS)**



Agriculture Network Information Center (AgNIC)

Description:

The Agriculture Network Information Center (AgNIC) is a voluntary alliance of the National Agricultural Library (NAL), land-grant universities and other agricultural organizations, in cooperation with citizen groups and government agencies. AgNIC is a distributed, collaborative partnership providing quality electronic agricultural information and resources via a portal on the Internet. The Center is hosted and coordinated by USDA's National Agricultural Library. Each AgNIC partner provides a virtual collection of content, resources, and online reference services in a specific topic in agriculture in which it is strong. AgNIC therefore serves as a subject interface to the land grant system, bringing together information resources created with a combination of federal and state efforts. The AgNIC network expands the concept of E-government to include government partners and to include all significant resources within the scope of agriculture.

Goal or Purpose of Initiative:

To provide access to broadly available, quality electronic information and reference services through significant partnerships and resource sharing with the agricultural information community world-wide regardless of the location of these resources.

Agencies Involved:

This vital, distributed partnership includes the USDA Agricultural Research Service; USDA Cooperative State Research, Education & Extension Service; USDA Economic Research Service; and the USDA Natural Resources Conservation Service as well as various land-grant institutions; non-profits; professional societies; and foreign networks of government, university and other information-producing organizations. AgNIC's newest partner is the Agricultural Information and Documentation System for America (SIDALC), a Latin American network providing electronic resources to the Spanish language customers on Latin American agriculture. AgNIC's goal is to include partners from all government sectors. The list of partners may be found at: <http://www.central.agnic.org/agnic/about/agnic/Subject.html>



Agriculture Network Information Center (AgNIC)

Cost Savings: AgNIC allows institutions to focus on several narrow topics in agriculture rather than attempt to collect and disseminate information in all the topics. This offers a tremendous savings in collection costs, especially at the university level. AgNIC and the reference staff at each site reduce the amount of time spent searching for information and resources.

Awards won: AgNIC is a recognized for quality agricultural information by Internet evaluation sites such as the Internet Scout and AmericanUniversity.Net® Educational Excellence Award

Time Saved: By referring reference queries to other subject-specific partner sites allows front-line reference staff to focus on other queries. Time is greatly reduced for customers searching for information.

Errors Reduced: Referring customers to appropriate subject specialists ensures accurate and quality responses. Maintaining a central vocabulary allows AgNIC customers to achieve precise search results. Following standards promotes inter-operability between systems to allow access to a broad number of resources.

Feedback from users, etc. An official user survey has not been completed, however, users have provided consistently positive feedback for services and information.

Type of Initiative: Government to Citizen, Government to Partner

Time to Create: The USDA's National Agricultural Library provides leadership for AgNIC. NAL supports the AgNIC Coordinator, a part-time programmer, and an operating budget (approximately \$160,000) Each partner obtains funding to participate and provide a web site.

Future Directions: AgNIC plans to continue to build partnerships, incorporate expanded foreign language capability, increase subject coverage, and develop a technology that allows ease of use. AgNIC provides the opportunity to create a single information repository and search tool for USDA agencies and collaborators.

Lessons Learned: AgNIC partners have learned that this type of partnership requires tremendous communications. To move ahead quickly, funding needs to be appropriated

Applicability: The U.S. Department of Agriculture is one of the government's largest information producers. Many of the agencies work with citizens in the U.S. and around the world. Disseminating this information is in the best interest of the entire Department of Agriculture.

Web Site URL: <http://www.agnic.org>



**Research, Education, and
Economics
(REE)**

**Economic Research Service
(ERS)**



ERS Web Site

Description: Serves as the electronic window to the complete range of data/info for the Agency's program responsibilities. Frequently updated information is organized based on topics that users care about.

Goal or Purpose of Initiative: To provide real-time, real-value data and analysis on agriculture, environment, trade and other related issues.

Benefits: Special features result in ease-of-access and ease-of-use: All publications and data are available free online, quick links to specialists and other contacts, opportunity for customer feedback, calendar of upcoming releases and events, E-mail notification system to customers regarding recent postings and updates, appropriate documentation on all products

Type of Initiative: Government to Citizen

Web Site URL: <http://www.ers.usda.gov>

Number and Description of Users: The ERS web site currently serves approximately 5,000 daily visitors and 80,000 distinct monthly visitors. Over 5,000 e-mail subscribers receive weekly notices of new or updated web site products. ERS web site visitors are based mostly in the U.S. and include policy makers, economists and social scientists, interest groups, and the general public.

Time to Create: Contract cost \$160K; about 5 FTE for 1 year

Future Directions: Develop metrics that measure success of web designs; improve data accessibility and interactive analysis functions; develop web customization based on customer needs

Lessons Learned: The successful redesign of the ERS web site could not have been completed without support and involvement from senior managers, a web project leader with excellent management and organization skills, and commitment from all ERS employees.

Applicability: The process used by ERS to redesign its web site is very applicable to other agencies. After the new ERS web site was unveiled, the web project leader was asked by several agencies to describe the process to their managers.



National Resources and Environment (NRE)



Soil Data Viewer

Description: Provide soils data to NRCS planners and the public

Purpose of Initiative:

There are two Soil Data Viewers: Client version that runs as a Visual Basic extension of ArcView for use in Service Centers (Field Offices) and a Web version for general public use. The web version is a pilot with 18 soil surveys currently accessible.

Benefits:

Provide users easy access to soil survey data in resource assessment and analysis while shielding the user from the complexity of the soil database and encapsulating rules for appropriate use of the soil data.

Time to create/costs:

The client Soil Data Viewer was developed over a two year time frame. The web version utilizes custom code developed for the client version implement in the web version with COM+ and Active Server Pages. The web version was developed in a six month timeframe.

Future Directions Planned:

Client version enhanced to be in-sync with the soil database to providing the list of interpretations and properties available in the specific soil survey. Web version incorporate into the Soil Survey Division soil data warehouse initiative providing general user access to soil data and information.

Lessons Learned:

Providing an easy to use interface for using soil data allows user to focus on utilizing the soil data resource in their analysis and resource conservation planning while not requiring them to be a GIS or soil database specialist.

Number/Description of Users:

Client version used in all field offices and state offices, centers and institutes. Web version may initially see 100 users a day with increasing over time: conservation partners, private consultants, and general public.



CAMS

Description/Purpose of Initiative: Improve internal functioning and service to employees

Benefits: CAMS provides employees web-based access to their own HR information as well as the capability to make requests. Self Service capabilities include Awards(Spot and Time Off nominations), Self Profile (Education Level, Emergency Contacts, Personal Data, Personnel Actions, Position Descriptions, Training History), Performance Plan/Appraisals, Training (Course Catalog, Request Course, etc.), Supervisory Query (Emergency Contacts, Personal Data, NTE Extension, Personnel Actions, Retirement Query, Training Query, etc.)

Time to create/costs: Implemented nationwide September 25, 2000. This completed a two year development and deployment period. The current FY-02 budget is 3.4 million. Life cycle costs are estimated to be 22.6 million through 2007.

Future Directions Planned: Continued addition of self-service functionality, including benefits requests, skills management, query reports, and recruitment.

Lessons Learned: Need for continued marketing to employees and management.

Number/Description of Users: Currently, CAMS-HR is deployed nationwide servicing the employees of the County Based Agencies of the U.S. Department of Agriculture (Rural Housing Service, Risk Management Agency, Foreign Agricultural Service, Rural Utilities Service, Natural Resources Conservation Service, Rural Business-Cooperative Service, Farm Service Agency, National Sheep Industry Improvement Center, and the FSA-County Employees). The database is currently servicing 60,000 + employees.



USDA Forest Service Section 508 Techniques Guide for Web Developers

Description: The Forest Service (FS) Section 508 Techniques Guide is an online technical guide used by agency webmasters and web content contributors who develop information intended for access and display on the agency's world wide web (www.fs.fed.us). The guide provides training, examples and techniques for developing accessible web content. The guide is available for reference at <http://www.r5.fs.fed.us/accessibility/>

Goal or Purpose of Initiative: To ensure universal access to Forest Service information and compliance with Section 508 of the Rehabilitation Act.

Benefits: The FS web-site, serving over 5 million visitors yearly, provides information to business partners and the public throughout the world in both urban and rural areas. Accessible information improves agency effectiveness and provides increased customer and employee satisfaction.

Number and Description of Users: This project targets FS web developers but the ultimate benefactor is the public. Currently, the agency has over 350 individuals who provide content to the web at over 127 locations



Administration



Office of Ethics

Goal or purpose of initiative/needs met: Provide information, training, and electronic reporting to USDA employees

Type of Initiative: Government to Government/Employees/Internal Efficiency

Agencies Involved: DA/Office of Ethics, National Finance Center, Office of Government Ethics, others

Web Site URL: www.usda.gov/ethics

Lessons Learned:

Start basic

Plan upgrades

Avoid fancy multi-media

Avoid downloadable applications

Make the information flow two-way

Number and Description of Users:

17,000 USDA employees world wide with annual financial disclosure and training requirement

135,000 visits from 7/18/2000 to 11/21/2001

7 agencies using site; 12 more interested

17 agencies using some features



Farm and Foreign Agricultural Service (FFAS)



Farm and Foreign Agricultural Service (FFAS)

**Foreign Agricultural Service
(FAS)**



Unified Export Strategy

Purpose and Description:

The Foreign Agriculture Service administers several programs, including the Market Access Program and Foreign Market Development Program, that provide over \$135 million in funding to over 65 industry partners, both in the U.S. and overseas. UES was designed to streamline the administration of these interrelated programs while focusing on results, improving resource allocation benchmarks, and de-emphasizing bureaucracy.

Goals:

- Move to results-based focus
- Take a long-term strategic perspective
- Enhance staff & partner marketing skills
- Standardize resource allocation criteria
- Standard performance benchmarks
- Move from paper driven operations to web-based applications

Type of initiative: Government to Partner

Benefits:

UES improved customer service by combining applications to reduce paperwork burdens (by 11,000 submissions annually). Additionally, UES reduced reimbursement time from 3 weeks to 3 days, and it reduced redundant information requests—overall, industry burdens were reduced by 30 staff years. Performance measurement was improved through creating benchmarks and measurement tools.

Future directions planned:

Improve ease of use, take the UES live in real time, improve data & information accessibility, bring other data sources into UES, and make UES the platform for all export programs. Pioneering efforts have high costs; analyze needs and requirements, then apply technology – needs drive development; think big, start small

Lessons Learned:

Web migration succeeded, but integration with partner systems is incomplete, especially with the Commodity Credit Corporation.



**Farm and Foreign Agricultural
Service
(FFAS)**

**Risk Management Agency
(RMA)**



RMA Online

Description: The Tool site is a set of Interactive risk management applications that provides the public crop insurance information and decision support in the management of risk.

Agency or agencies involved: Risk Management Agency

Goal or purpose of initiative/needs met: To provide the public with risk management tools and information.

Type of initiative: Government to Citizen/Government to Partner

Web site URL: <http://www.rma.usda.gov/>

Benefits:

Timeliness of information:

Producers able to make more educated decisions

Agents can provide better service to producers

Reproduction errors reduced

Broader dissemination of information

Lessons learned:

Make it user friendly

Make it interactive

Users: Producers, Universities, Agents, General Public, Private Product Submitters



Farm and Foreign Agricultural Service (FFAS)

**Farm Service Agency
(FSA)**



Electronic Bid Entry System (EBES)

Description: EBES automates via the internet the bid entry portion of USDA's procurement of commodities exported under various foreign donation programs.

Goal or Purpose of Initiative: To minimize the time required to develop, transmit, receive and evaluate competitive bids.

Benefits: Over 200 electronic bids are being submitted via the internet per USDA procurement.

Type of Initiative: Government to Business

Number and Description of Users: 80 independent vendors.

Lesson's Learned:

New Systems must be capable of Change. Program Specialist or Contracting Officer must be capable of making system changes - without code writers.

Develop an A to Z Business Plan - First ! ! !

Re-engineer your business practices

Involve your customer base

Government contracting/budgeting process too slow/encumbered

Government contractors unfamiliar with agriculture

Use COTS systems

Use Commercially available IT systems - updates/change/budgeting issues reduced

Future Directions: FSA has built upon this success by building a similar system to handle procurements for Domestic distribution of food assistance (Domestic Electronic Bid Entry System) and is in the process of building the Freight Entry Bid Entry/Evaluation System to handle the acquisition of freight bids for the foreign donation programs. To close the end-to-end nature of FSA procurement process, they are building a web-based application system that will streamline program operations and improve customer service by linking the originating agencies (USDA/FAS, USAID, and the UN) requests for procurement with the procurement and freight systems.



Staff Offices



Notification of OIG published Audit Reports

Description: As OIG completes an audit report and posts it to the OIG Website, an e-mail notice is sent to certain Congressional offices that have an interest in USDA's operations. The message provides the title of the audit report and gives the Web site address where the staffs can access the report.

Agency or agencies involved: OIG, Office of Operations (Copier Services Branch, Courier Services), various Congressional staffs.

Goal or purpose of initiative/needs met: Information is now accessible in a more timely fashion to both Congressional offices and the public. We have increased efficiency and reduced cost to provide the service.

Type of initiative: Government to Citizen and Government to Partner (Congress).

Web site URL: www.usda.gov/oig/auditrpt/auditrpt/htm

Cost savings: Since September 2000, we have used 9,549 sheets of paper to notify Congress when audit reports are issued. The approximate cost in staff time, for photocopying, courier service, and envelopes has exceeded \$1,928.

Awards won: Congressional offices can now receive quicker notification and access the entire report instead of only the Executive Summary.

Time saved: Since September 2000, we expended approximately 81 hours of staff time to support the hardcopy delivery process. In addition, we waited approximately 2-3 days each month for the Copy Center to photocopy the documents, which added to the delay in delivery of the information.

Feedback from users: Since the attacks of 9/11/01, mail delivery has been very difficult for most Congressional offices. The Congressional staffs are pleased that they can now receive this information more quickly and without the complications of hardcopy delivery.

Time to Create: Minimal time was needed for this process since we were already using the FOIA review process for our audit reports.

Lessons learned: When implementing a new process, look for associated tasks that could benefit from the procedures used in the new process and any advances in technology that may apply.

Applicability to other Mission Areas/Agencies: This approach could be adopted by any agency/office needing to provide information to another agency/office as long as both have e-mail capability and Internet access.

Number and description of users: We will be sending these e-mail notifications to 52 Congressional offices starting this month.



Appendix



Marketing and Regulatory Programs (MRP)



Livestock Mandatory Price Reporting System

Description:

Web-hosted electronic transaction system using PKI

Goal or purpose of initiative/needs met:

Provide industry with rapid, electronic process for reporting price data to USDA and for USDA to rapidly compile and publish reports.

Type of initiative:

- ✓ Government to Citizen
- ✓ Government to Business

Web site URL:

www.ams.usda.gov

Benefits:

Provide industry with rapid, electronic, secure process for complying with requirements of the Livestock Mandatory Reporting Act of 1999

Allows USDA to compile submitted price data and distribute price reports several times a day within an hour of each cut-off time for receiving price data

Uses PKI to positively identify the source of the data and provide non-repudiation that ensures data integrity

Number and Description of users:

Approx. 350 industry producers, traders and growers



Annual Animal Usage Report

Description:

Automated Reporting by Customers

Agency or agencies involved: Animal and Plant Health Inspection Service

Goal or purpose of initiative/needs met: Collection of information, Reporting

Type of initiative:

- ✓ Government to Partner
- ✓ Government to Government/Employees/Internal Efficiency

Web site URL:

<https://web01.aphis.usda.gov/AC/APHISACWeb2.nsf?OpenDatabase>

Benefits:

cost savings – staff, mailing

awards won – none

time saved – data entry, report compilation

errors reduced – transcription

feedback from users, etc. – easy to use

Number and Description of users: 1000 Licensed Research Facilities



E-FOIA Animal Care Inspection Reports

Description:

Automated query and reporting tool

Agency or agencies involved:

Animal and Plant Health Inspection Service

Goal or purpose of initiative/needs met:

Query and retrieve inspection reports

Type of initiative:

✓ Government to Citizen

Web site URL:

<https://www.aphis.usda.gov/ac/laris7/query-cust.html>

Benefits:

cost savings – staff, mailing, information services

awards won – none

time saved – staff research, report compilation

errors reduced – inaccurate reporting

feedback from users, etc. – can tailor queries

Number and Description of users: Any interested citizen



VS Scrapie Flock Status Report

Description: Automated Services to Customer

Agency or agencies involved:

Animal and Plant Health Inspection Service

Goal or purpose of initiative/needs met:

Provide tracking information online

Type of initiative:

- ✓ Government to Citizen
- ✓ Government to Partner
- ✓ Government to Government/Employees/Internal Efficiency

Web site URL:

<https://cofcs18.aphis.usda.gov/scrapie/reports>

Benefits:

cost savings – staff, mailing, information services

time saved – reduced research

errors reduced – inaccurate reporting

feedback from users, etc. – very flexible, fast results

Number and Description of users: Any interested citizen



Research, Education, and Economics (REE)



Research, Education, and Economics (REE)

**Cooperative State Research, Education, and Extension Service
(CSREES)**



Cooperative Research, Education, and Extension Management System (C-REEMS)

Description:

C-REEMS integrates all aspects of the proposal review and award process (from appropriation to disbursement, from proposal receipt to post-award, reporting on all aspects) into a single management system, eliminating redundant data entry, applying business management rules, facilitating access to information, and enhancing the speed and accuracy of reporting. Further, C-REEMS serves as a core part of the platform for future e-grants.

Goal or Purpose of Initiative: To improve efficiency and effectiveness of the grants process

Benefits:

Elimination of redundant data entry

Enforcement of business management rules

Improved access to information

Automation of manual processes

Enhancement of the speed and accuracy of reporting

Agencies Involved:

Cooperative State Research, Education, and Extension Service (CSREES)

Type of Initiative:

Internal Efficiency

Number and Description of Users: 300 users – virtually all agency employees



Current Research Information System (CRIS)

Description: The Current Research Information System (CRIS) is the U.S. Department of Agriculture's documentation and reporting system for ongoing agricultural, food and nutrition, and forestry research. CRIS contains over 30,000 descriptions of current, publicly supported research projects.

Goal or Purpose of Initiative: To document the research activities of the USDA/State agricultural research system for various reporting purposes, and provide ready access to information which can help users to keep abreast of the latest developments in research, plan future research activities, avoid costly duplication of research, and establish valuable contacts within the research community

Benefits: All associated costs are shared with participants; thereby saving limited resources. The extensive sharing of information reduces costs by avoiding duplication of research resources and assists researchers in identifying others within the research community with similar interests. The concept of "one stop shopping" for agriculturally related research information saves everyone time and effort

Agencies Involved: Agricultural Research Service (ARS), Cooperative State Research, Education and Extension Service (CSREES), Economic Research Service (ERS), Foreign Agricultural Service (FAS), Forest Service (FS), Natural Resources Conservation Service (NRCS), Rural Business-Cooperative Service (RBS)

Type of Initiative: Government to Citizen, Government to Partner, Government to Government

Web Site URL: <http://cris.csrees.usda.gov>

Number and Description of Users: Approximately 7,000 visits per month. Users consist of the general public, students, researchers, research administrators, budget personnel, and officials at all levels of international, federal, state, and local governments. Farmers, teachers, and media personnel also use CRIS



**Research, Education, and
Economics
(REE)**

**National Agricultural Statistics Service
(NASS)**



Data Warehouse

Description: NASS has integrated its strategic on-line database of historical farm survey and census responses into applications being built for the 2002 Census of Agriculture and beyond. Our early adoption and implementation of Data Warehousing for decision support has positioned NASS as a leader in the international statistical community. Besides the publication of our work in conference proceedings and private technical journals, we have provided best practices consulting to other Government Agencies and Foreign Governments.

Goal or Purpose of Initiative: To integrate activities to improve process control, data quality, analysis, and timeliness, to contribute to the NASS strategic planning effort by spotting early trends and changes in different sectors of the agricultural economy. New customer relationship management initiatives are also possible using the Data Warehouse to improve responses to surveys and to understand and respond to new customer needs

Benefits:

Awards Won: Best Practices Award, Data Warehousing Institute

Time Saved: Ad Hoc and context data analysis greatly increased and facilitated Currently the Data Warehouse contains over one billion survey and census data points from 1997 to the present.

Errors Reduced: Effective data analysis (current data and historical data together)

User Feedback: "Could not get job done without it"

Agencies Involved: National Agricultural Statistics Service (NASS), Central Intelligence Agency (CIA), The Australian Bureau of Statistics (ABS), The Peoples Republic of China, Other Federal Agencies

Type of Initiative: Government to Citizen, Government to Partner, Government to Government/Employees/Internal Efficiency

Web Site URL: <http://nassnet/%7Edwhouse/>

Number and Description of Users: 700 Internal Users

Time to Create: Began work in 1995, online in 1997

Future Directions: Full integration with operational programs, surveys and census

Lessons Learned: Listen to your consultants. Align direction with strategic plan.

Applicability: Broad and underutilized



Crop Progress and Condition System, WEB Data Collection (CPCS-WEB)

Description: The Crop Progress and Condition report is a weekly report on crop progress and conditions compiled from reports submitted from local experts throughout the country. The WEB data collection system gives these local experts the option of submitting these reports electronically through the Internet.

Agencies Involved: The National Agricultural Statistics Service (NASS) is the primary agency involved in this project. Many of the individual reporters or local experts are employees of their respective state's Cooperative Extension Service, or are employees in the county service centers of the Farm Service Agency (FSA).

Goals or Purpose of Initiative: The WEB Data Collection system is intended to make it easier for respondents to submit reports, improve the timeliness of the data reported, and improve the quality of the data reported. Since the data is captured electronically, it also reduces the processing time in the NASS offices necessary to summarize this weekly report.

Type of Initiative: Government to Citizen, Government to Partner, and Government to Government

Web Site URL: <http://cpcsweb.nass.usda.gov>

Number and Description of Users: The system current operates in 35 NASS State Statistical Offices. Approximately 2,750 local experts across the country have entered reports using this system. In the most recent (2001) crop year, about 60,000 individual weekly reports have been entered using the CPCS-WEB system.

Benefits: Cost savings have not been directly measured, but staff time necessary to capture and review data in 35 NASS locations has been reduced. Data received is more timely, since there are no mail delays involved. In many instances, the NASS data published on a Monday afternoon has come from reports submitted that same day. Data integrity checks built into the data collection instrument have improved the quality of the information collected. This application was developed in less than one half of a staff year. Equipment costs for a production server and development server were about \$3,000. Ongoing maintenance and support of the system requires about 0.15 FTE from our programming staff.

Lessons Learned: NASS has learned much about web-based data collection through use of this system. This has created a foundation for usability studies for future data collection efforts. Users have responded positively to this mode of data collection, and many actually write more comments about local crop conditions when reporting electronically, compared to when they reported on paper. The experience with this system has become a foundation for a greatly expanded Electronic Data Reporting (EDR) system being designed and prototyped in NASS. Once the new system becomes operational, CPCS-WEB will be migrated to the NASS EDR system. The current system is tailored to the needs of producing weekly Crop Progress and Condition Reports. The NASS EDR system is being designed as a much more flexible reporting tool that can satisfy a broad range of data collection requirements both internal and external to the Agency. The system will be able to concurrently administer multiple versions many different data collection questionnaires.



Time and Attendance

Best Practice Description: The NASS Time and Attendance System gives each employee the ability to enter hours worked and leave taken on a daily basis. Hours are charged to work activities and projects, giving the Agency the ability to accurately account for payroll expenses.

Agencies Involved: The National Agricultural Statistics Service (NASS) developed this system. Several years ago, it was modified to allow implementation by the Natural Resources Conservation Service (NRCS). Recently, NRCS has re-engineered the system as a WEB based system for use within their agency.

Goals or Purpose of Initiative: The Time and Attendance System was developed to improve the accuracy and efficiency of the timekeeping process. Also, the system was required to provide accounting by projects and activities for employees earning comp time or credit hours on flexible work schedules. The existing National Finance Center timekeeping systems do not provide this capability.

Type of Initiative: Government to Government/Internal Efficiency

Number and Description of Users: The system current operates in all NASS locations. All employees enter their own time. Approximately 1075 payroll records are transmitted to the National Finance Center each week. The system is also used to keep track of time non-federal employees in NASS offices, although it does not process payroll transactions for these employees.

Benefits: Use of this system has reduced the time required by timekeepers to process payroll each pay period. With employees having the ability to enter their time on a daily basis, the Agency gets a more accurate reporting of costs associated with different work programs and activities. The edit routines in the system have reduced the error rates on payroll transactions to less than one percent. The Agency also is able to account for projects and activities worked when employees are earning comp time or credit hours. The system has also automated the process of doing leave audits. This application was developed in about 2 staff years. Ongoing maintenance and support of the system requires about 0.5 FTE from our programming staff. NASS plans to work with NRCS in the future to implement their Web based system



**Research, Education, and
Economics
(REE)**

**Agricultural Research Service
(ARS)**



National Agricultural Library Digital Desktop Library Initiative

Description: The National Agricultural Library (NAL) is building its Digital Desktop Library to provide 24-hour access for USDA staff to key databases, journals, news services, statistics, and other important electronic information resources. Important agricultural books, journals, reference materials, and databases are increasingly available in digital form. While some of this information is available free of charge, many important digital publications must be licensed, often at a high price. The NAL provides access to these digital resources by obtaining USDA-wide licenses at lower rates and offering participating USDA agencies a single interface to the digital desktop library.

Goal or Purpose of Initiative: Comprehensive source of information for USDA employees

Benefits:

Cost-savings: By leveraging the Library's investment through combining it with agency resources, the National Agricultural Library's digital desktop library will fund USDA-wide licenses acquired at less cost due to significant economies of scale.

Feedback from users: The National Agricultural Library tested a prototype digital desktop library during May and June 2001, during which vendors provided almost \$10 million of content for user testing. The detailed feedback from the prototype was almost entirely positive. One tester, in rural Texas, wrote: "Thanks for the trial period with the digital desktop library. I am sorry that the "freebie" has come to an end! It was very helpful and such a timesaver for a remote location. We are two hours from the nearest technical library. It would be great to have the digital desktop library all of the time—or at least the CAB abstracts."

Agencies Involved: Food, Nutrition and Consumer Services, Food Safety Services, Rural Development, Marketing and Regulatory Programs, Natural Resources and Environment, Research, Education, and Economics Programs, Farm and Foreign Agricultural Services, Executive Operations, Other USDA Offices

Web Site URL: <http://www.nal.usda.gov/usda/digitop.htm>

Future Directions: The National Agricultural Library is adding information products to the Digital Desktop Library as it arranges licenses and identifies important free-of-charge products. This will be coupled with further marketing to obtain all-USDA financial participation in the initiative.

Applicability: Access to the first two "for fee" products licensed through this initiative has been extended to all USDA staff worldwide. Access to other "for fee" products can be extended to all USDA agencies, regardless of USDA Mission Area, depending on central funding availability and/or their financial participation in funding licenses.



Research, Education, and Economics (REE)

**Economic Research Service
(ERS)**



ERS Extranet

Description:

The Extranet is a private and secure meeting ground where ERS's partners/customers Access timely, relevant information and data to help them conduct business Experience a seamless interaction with information and the suppliers Work collaboratively with peers Create new, and participate in established, professional networks

Goal or Purpose of Initiative:

To provide a partnership fostered, information exchange among key customers, information tailored for specific customer needs, just-in-time information

Benefits: Remove communication barriers and facilitate work

Type of Initiative: Government to Partner

Web Site URL: Privileged access for authorized users

Number and Description of Users:

Policy and decision makers in various disciplines, about 10 per extranet

Time to Create: 15K per extranet initial cost

Future Directions: Depends on success and participation

Lessons Learned: Not applicable yet, just launched 5 pilot extranets

Applicability to other Agencies: Yes; in fostering data exchange in non-final form, participation in decision making, and coordinating inter-agency processes



Program Information Management System (PIMS)

Description: Web-accessible information management tool supporting staff analysis logs, weekly activity reports for USDA and REE administrators, project/work plan tracking, and output tracking. Integrates all aspects of ERS analysis support for USDA and other government agencies.

Goal or Purpose of Initiative: To capture information on all work efforts related to ERS research activities and improve response to internal and external requests for information

Benefits: Cost savings through increased efficiencies in consolidating the capture of and access to information for program planning and reporting purposes
Time savings by managers through improved report-generating capabilities and distribution of reporting responsibilities throughout the organization
Error reduction by standardizing activity reporting procedures

Type of Initiative: Government internal efficiency

Web Site URL: Internal access only

Number and Description of Users: Roughly 500 users, including: Department and agency administrators who track information concerning ongoing research and analysis within ERS, managers who track work progress and who generate reports to fulfill GPRA and CRIS (Current Research Information System) requirements, and researchers to obtain information to support their annual work plans and performance reviews

Time to Create: Two years from initial data modeling work to 3rd release at a cost of \$400,000 for contract support, plus 1 ERS FTE

Future Directions: Enhance system's structural integrity, interface design, and ease of use prior to expanding functionality

Lessons Learned : Replacing a series of informal paper-based systems with a comprehensive, reliable automated system demands more time and resources than anticipated

Applicability to other Agencies: While PIMS is tailored to ERS' business functions, the concept of consolidating information gathering and reporting into a single system is applicable to any agency